REMARKS

In the present amendment, claims 21 and 23 have been amended. Accordingly, claims 1-23 are pending in the application, with claims 1, 2 and 21 being independent claims. Of the pending claims, claims 21-23 are under consideration, and claims 1-20 are withdrawn from consideration.

Applicants note that claim 21 has been amended to be written in independent form and to include elements of claims 2 to 6. Moreover, claim 21 has been amended to recite only elected subject matter. No new matter has been added.

Response to Claim Objection

The Office Action objects to claims 21-23 because they are dependent from non-elected claim 1.

Applicants respectfully note that claim 21 has been rewritten in independent form and by reciting only elected subject matter.

Response to Rejection under 35 U.S.C. § 112, second paragraph

The Office Action rejects claim 23 under 35 U.S.C. § 112, second paragraph, alleging that it contains confusing language.

In response, Applicants respectfully submit that this rejection is addressed by the amendments of the claims 21 and 23.

Response to Rejection under 35 U.S.C. § 112, first paragraph

The Office Action rejects claims 21-23 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description and enablement requirements. The rejection asserts that the specification fails to describe enough representative species to provide adequate written description of the claimed genus and does not enable someone skilled in the art to perform the claimed invention in its full scope.

In response, Applicants respectfully submit that in order to advance prosecution of the application, and without expressing agreement or acquiescence to the rejection, claim 21 has been rewritten in independent form and elements of claims 2 to 6 have been added with focus on elected subject matter, such as calmodulin as target sequence, and skeletal muscle myosin light chain kinase (skMLCKp) as target peptide. Moreover, claim 21 has been amended to recite fluorescent protein Venus as fluorescent molecular component.

In view of these amendments, Applicants respectfully request withdrawal of the written description and enablement rejections.

Response to Rejection under 35 U.S.C. § 102(b)

The Office Action rejects claims 21-23 under 35 U.S.C. § 102(b) as allegedly being anticipated by Nagai et al. (Circularly permuted green fluorescent proteins engineered to sense Ca²⁺, PNAS, 2001, Vol. 98, No. 6, pp. 3197-3202).

Applicants respectfully submit, as noted above, that in order to advance prosecution of the application, and without expressing agreement or acquiescence to the rejection, claim 21 has been rewritten in independent form and elements of claims 2 to 6 have been added with focus on

elected subject matter, such as calmodulin as target sequence, and skeletal muscle myosin light chain kinase (skMLCKp) as target peptide. Moreover, claims 21 has been amended to recite fluorescent protein Venus as fluorescent molecular component.

Applicants respectfully submit that Nagai et al. does not anticipate the claimed invention, and withdrawal of the rejection is respectfully requested.

CONCLUSION

In view of the foregoing remarks and amendments, Applicants respectfully request withdrawal of the rejections of record and allowance of the pending claims.

Allowance of the application with an early mailing date of the Notice Allowance and Allowability is therefore respectfully requested. Should the Examiner have any further comments or questions, or wishes to discuss the matter, she is invited to call the undersigned at the telephone number indicated below.

> Respectfully submitted, Atsushi MIYAWAKI et al.

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